

IN THE CLAIMS:

A complete listing of all the claims is presented herewith:

Claims 1 to 46 (Cancelled).

47. (Currently Amended). Process for destabililizing a viral quasi-species-distribution without inducing resistance to therapeutic agents comprising replicating of nucleic acids of viruses ~~present in the quasispecies-distribution~~ by means of a defective replication system,

~~providing wherein~~ the defective replication system incorporates nucleotides with a rate of misincorporation ~~for nucleotides~~ higher than a rate of misincorporation of the viral system of a wild-type, and the defective replication system is induced by action of a chemical substance active agent and,

wherein the viruses are replicated by the replication system having the higher rate of misincorporation at least as effectively as it is done by the replication system of the wild-type virus.

48. (Cancelled).

49. (Cancelled).

50. (Currently Amended). A process according to claim
~~49,~~ 47, comprising
selecting the chemical substance from the group
consisting of an antimetabolite and an allosteric effector of
the replication system.

51. (Cancelled).

52. (Cancelled).

53. (Currently Amended). A process according to claim
~~47,~~ comprising
selecting the replicaton systems from the group
consisting of RNA or DNA polymerases and co-factors of RNA or
DNA polymerases.

54. (Cancelled).

55. (Cancelled).

56. (Cancelled).

57. (Cancelled).

58. (Cancelled).

59. (Cancelled).

60. (Cancelled).

61. (Currently Amended). A process for the treatment of viral infections or for the treatment or prophylaxis of viral diseases in a patient, comprising ~~either transforming affected target cells with a vector system, or transforming target cells by infiltration of a viral system which is leading to a higher error rate of misincorporation, or the~~ treating target cells with one or more substances which cause an increased rate of misincorporation for nucleotides of the viral replication system.

62. (Currently Amended). A process according to claim 61, 47,

wherein ~~host cells are~~ the target cells of the viral

infection ~~and~~ or viral disease are selected from the group consisting of monocellular organisms, bacteria, plant cells, animal host cells, blood cells, and erythropoietic stem cells.

63. (Previously Presented). An agent for the performance of the process according to claim 47, comprising a nucleic acid or a nucleic acid coding for a nucleic acid obtained by reaction of nucleotides and a viral replication system as well as other factors which are necessary for the reproduction of viruses under formation of oligo- or polynucleotides, whereby it is exclusively selectioned towards maximum amplification of the oligo- or polynucleotides by the viral replication system.

64. (Previously Presented). An agent according to claim 63, comprising at least one gene segment coding for a viral replication system and/or a co-factor of a viral replication system,

wherein the system to be coded is leading to a viral replication system with a higher rate of misincorporation than fixed by a native replication system, whereby the efficiency of the replication is at least maintained.

65. (Currently Amended). An agent according to claim 63, comprising together with the replication system, which is leading to higher rates of misincorporation, transformed viruses, phages or ~~eucaryotic~~ eukaryotic cells or procaryotic cells and/or respectively prepared phages or plasmids for the transformation of the target cell or transformed target cells themselves.

66. (Currently Amended). An agent according to claim 63,
~~wherein they are~~ comprising replication enzymes and cause a replication above the inherent error threshold under an at least equal replication efficiency as compared with the wild-type.

67. (Previously Presented). A method of destabilizing viral quasi-species distributions without inducing resistance to therapeutic agents comprising inducing defective replication of nucleic acids of the viruses present in the quasi-species distribution around a consensus sequence by replicating the nucleic acids by a defective replication system that has a rate of nucleotide misincorporation higher

than the rate of nucleotide misincorporation of the viral wild-type replication system and a replication efficiency at least as great as the wild-type replication system.

68. (Currently Amended). The method according to claim 67,

wherein the defective replication system results from a natural mutation of the ~~quasi~~ quasi-species distribution or is produced by ~~metagenesis.~~ mutagenesis.

69. (Cancelled).

70. (Previously Presented). The method according to claim 67, comprising

further destabilizing the viral quasi-species distribution by one or more nucleases, ribozymes, antisense-RNA, or combinations thereof directed to components of the virus.

71. (Previously Presented). The method according to claim 67,

wherein the destabilization of viral quasi-species distribution occurs in plant cells or animal cells.

72. (Previously Presented). A process according to claim 61, comprising

transforming the affected target cells with a vector system comprising a viral vector system, having at least one viral replication system which is leading to a replication system with a higher rate of misincorporation.

73. (New). A process for identification of a chemical substance active agent according to claim 49 comprising

- (a) incubation of the replication system of cloned variants of the wild-type virus in infected target cells with putative active agents of different concentrations, and
- (b) detection of incorrect virus variants and therefore identification of the active agent.